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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,479

07/23/2003

Amit Ramchandran

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11/17/2006

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EXAMINER

COLEMAN, ERIC

ART UNIT

PAPER NUMBER

2183

DATE MAILED: 11/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/626,479	Applicant(s) RAMCHANDRAN, AMIT	
	Examiner Eric Coleman	Art Unit 2183	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 October 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1,2,5-8 and 11-20.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____
13. ☐ Other: _____.


Eric Coleman
Primary Examiner

Continuation of 11. does NOT place the application in condition for allowance because: of the reasons stated in the final rejection. The features of claims 3,4 and 9-10 are incorporated into the corresponding independent claims and therefore the arguments for claims 3,4,9,10 now apply to the corresponding independent claims. Applicant argues that Suzuki performs single and multiple cycle calculations but alleges that Bartkowiak can only retain data during the timeslot for which the information is available therefore the two reference could not be combined. The Examiner however contends that Bartkowiak taught (e.g., see col. 5, lines 10-20) that the functional units can operate on single cycle operation and operations where multiple cycles elapse during performance of the instruction operation. Since the data would have been input to the functional unit when the previous operation had completed then the data would have been held in the registers for multiple cycles in both Suzuki and Bartkowiak reference when multiple cycle operations were performed. Applicant further alleges that Suzuki does not teach the pairs of registers are allegedly not coupled as claimed. The Examiner contends that the registers are coupled in a manner that meets the claimed invention. Suzuki taught data that is used to control whether whether pairs of pipeline registers are loaded [e.g., see fig. 4 where pipeline registers (106,34,32,102) are paired and selectively received data at same time or with time delay (104), see paragraphs 7 and 8 of the final rejection. The applicant argues a 7-bit control word to allow cascading or 72-bit operations and a most significant bit determines whether one or both of the input pipeline registers in a pair are load however these combination of features are not claimed. Edwards taught the part of this combination that was claimed. The combination of this feature with being able to use a data value if that value is ready at time just before the execution stage of the instruction is not claimed. However the Suzuki system provides for use of a data value if the a data value is ready using the selectors (e.g. see fig. 13). The Examiner contends that even if the four pipeline registers operate as two pairs they provide the limitations in the claim as detailed in the outstanding rejection. Applicant alleges that Edwards cannot be combined with Suzuki however even is the type of gates implemented in the two references are different there is no requirement in 35 U.S.C. 103 that each element of one reference is the same or even compatible with each element of another reference but instead that the combination of the teachings of the references were obvious. One of ordinary skill would have recognized that use of gates that there were industry standard gates would have been used depending on the considerations of the circuit and cost etc. Therefore, the Examiner contends that one of ordinary skill would have been motivated incorporate the teachings of Edwards into the Suzuki teachings. While every element of one reference may have not been completely compatible with every element of another reference the compatibility issues would have been within the level of skill of one of ordinary skill to remedy. As to the portion of claim 13 noted by the Applicant namely that the input register being configured to store a value received from the bus at the beginning or end of the first clock cycle. In Suzuki operation of the pipeline is clocked (e.g, see fig. 12). The use of leading edge or trailing edge triggering of the operations was well known alternatives for implementing synchronous control of transfer of data. One of ordinary skill would have been motivated to use either a edge triggering for precise control of clocking and the method would have provided for triggering at the beginning or end of a cycle. The clocking in figure 12 of Suzuki provide for data trigger for input or output at the beginning or end of a clock cycle. As to the loading of constant Suzuki taught the loading of data for processing of instructions (e.g, see col. 2, lines 13-46). A constant is merely data that does not change and in the processing of instructions clearly it would have been obvious to one of ordinary skill that data used for calculations at times would incorporate constants (e.g., data stored in the Suzuki flops or registerfile such as standard constants for use in data conversions). Also the operation of the claimed invention does not change whether the data is a constant or not and therefore the use of any data of a size that could be processed by Suzuki would have been obvious in view of Suzuki.